

## Complete Summary

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### GUIDELINE TITLE

Mealtime difficulties for older persons: assessment and management.

### BIBLIOGRAPHIC SOURCE(S)

Amella EJ. Mealtime difficulties. In: Mezey M, Fulmer T, Abraham I, Zwicker DA, editor(s). Geriatric nursing protocols for best practice. 2nd ed. New York (NY): Springer Publishing Company, Inc.; 2003. p. 66-82. [28 references]

### COMPLETE SUMMARY CONTENT

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### SCOPE

#### DISEASE/CONDITION(S)

Physical, cognitive and/or psychological conditions that may contribute to difficulty with eating, including:

##### Physical

- System-specific problems (see History and Physical Assessment section of the "Major Recommendations" field)
- Dehydration
- Dysphagia
- Movement disorders (e.g., Parkinson's disease, stroke)
- Functional impairment
- Systemic infections
- Mechanical disorders (e.g., severe cervical spondylosis in C4 to C7 with osteophytes, tracheotomy tubes, significant kyphosis, poor dentition)
- Multiple sensory changes (vision, hearing)
- Iatrogenic (e.g., adverse drug reactions)

##### Cognitive

- Aphasia
- Apraxia
- Agnosia
- Amnesia
- Anorexia

#### Psychological

- Affective disorders (e.g., depression)

#### Cultural, Religious, and Social Influences

#### GUIDELINE CATEGORY

Evaluation  
Management  
Screening

#### CLINICAL SPECIALTY

Family Practice  
Geriatrics  
Internal Medicine  
Nursing

#### INTENDED USERS

Advanced Practice Nurses  
Allied Health Personnel  
Health Care Providers  
Nurses  
Patients  
Students

#### GUIDELINE OBJECTIVE(S)

- To describe older adults who are at high risk for inadequate nutrition and hydration related to problems at mealtime
- To identify physiological parameters that are used to assess the nutritional status of older adults
- To discuss methods that can facilitate mealtime independence for older adults
- To identify ways to maximize contextual cues both in the home and in the institution that could facilitate positive mealtimes for disabled or cognitively impaired older adults
- To identify members of the interdisciplinary team who could facilitate mealtimes

#### TARGET POPULATION

Hospitalized or institutionalized older adults

## INTERVENTIONS AND PRACTICES CONSIDERED

### Risk Assessment/Prognosis

1. Screening Tools
  - Mini-Nutritional Assessment (MNA)
  - DETERMINE Your Health
2. Questioning of patient and/or caregiver(s) regarding:
  - Dietary habits
  - Use of culturally and/or religiously significant rituals
  - Preferences regarding end-of-life decisions
3. Review of systems and physical examination
  - Height and weight to calculate body mass index (BMI)
  - Blood pressure, heart rate
  - Review food and fluid intake
  - Laboratory testing for malnutrition may include serum albumin, prealbumin, transferrin, serum cholesterol, hemoglobin, hematocrit, B12 levels, and total lymphocyte count. Lab testing to assess for dehydration includes: serum sodium (hypo- or hypernatremia), potassium (hyperkalemia), creatinine (not as reliable in elderly persons), blood urea nitrogen (BUN), urine specific gravity, and/or urine electrolytes.
  - Cognition/behavioral testing: ED-FedQ assessment instrument to determine stage of eating behavior
4. Preventive oral care
  - Referral to dentist as needed
5. Treatment for pain, problems with gastrointestinal tract (i.e., constipation)
6. Assess possible medication interactions
  - Interactions with food(s)
  - Medication side effects (tardive dyskinesia)
  - Consult with clinical pharmacologist as needed
7. Assess for depression
8. Assess for swallowing problems
9. Assess for malnutrition and dehydration
10. Assess for physical conditions that may lead to malnutrition (e.g., stage III or IV CHF)

### Management

1. Ongoing monitoring of vitals (blood pressure, heart rate) and food and fluid intake (e.g., calorie counts)
2. Referral to speech therapy to evaluate swallowing/coughing
  - Videofluoroscopy
  - Alter food texture as appropriate (i.e., puree, finger foods)
3. Referral to occupational therapy for seating, adaptive equipment, therapy as appropriate
4. Consult with dietician
5. Education provided to patient and family/caregiver and nursing assistants regarding appropriate technique and level of meal assistance (cueing, hand-over-hand) and estimating food consumption
6. Change dining environment to facilitate enjoyment of meal (i.e., use of place settings, reduce distractions)

7. Assess patient's relationship with caregiver

#### MAJOR OUTCOMES CONSIDERED

- Percentage of older adults receiving assistance with meals
- Validity and reliability of screening tools
- Vitals: Weight and height measurements, systolic blood pressure, heart rate
- Results of laboratory testing
- Percentage of meal intake
- Amount of assistance required at meals (i.e., minimal, moderate, total assistance)

### METHODOLOGY

#### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Medline and CINAHL were the electronic databases used.

#### NUMBER OF SOURCE DOCUMENTS

20

#### METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus

#### RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

#### METHODS USED TO ANALYZE THE EVIDENCE

Review

#### DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

#### METHODS USED TO FORMULATE THE RECOMMENDATIONS

Informal Consensus

#### DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

#### COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

#### METHOD OF GUIDELINE VALIDATION

Peer Review

#### DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The guideline was reviewed by a content expert.

### RECOMMENDATIONS

#### MAJOR RECOMMENDATIONS

##### Assessment with Elder and Care Givers

- Rituals used before meals (e.g., hand washing and toilet use), dressing for dinner.
- Blessings of food or grace, if appropriate.
- Religious rites or prohibitions observed in preparation of food or before meal begins, e.g., Moslem, Jewish, Seventh Day Adventist. Consult with Pastoral counselor, if available.
- Cultural or special cues of family history, especially rituals surrounding meals.
- Preferences as to end-of-life decisions regarding withdrawal or administration of food and fluid in the face of incapacity, or request of designated health-proxy. Ethicist or social worker may facilitate process.

##### History and Physical Assessment (Focused) Coordinated with Nursing and Medicine

- Weight and height - on admission to determine Body Mass Index (weight in kg/height in m<sup>2</sup>); thereafter weight taken at least every 7 days if a diagnosis of alteration in nutritional status exists. Weight loss/gain strategy devised by Registered Dietician with input from provider, if appropriate.
- Skin - lesions, turgor, dryness, hair loss.
- Neurological - Cranial nerves V, VII, IX, X, XI, XII (involved in swallowing).
- Sensory limitations - vision, smell, taste, hearing.
- Oral cavity - cleanliness, dentition including caries at root and surface, fit of denture or other oral appliances, lesions, condition of gums and tongue. Refer to Dentist for evaluation and treatment.

- Neck - capacity to swallow. Refer to Speech Language Pathologist for thorough assessment.
- Respiratory - restrictive disease limiting ability to eat or tolerate larger quantities of food, oxygen desaturation during meals, exercise intolerance. Refer to Respiratory Therapist, if appropriate.
- Cardiac - presence of heart failure -- Stages III or IV, or poorly controlled angina, indicating intolerance of any activity.
- Gastrointestinal – Gastroesophageal reflux disease (GERD), hiatal hernia, hypo or hyperactive bowel (constipation or diarrhea), abdominal pain or tenderness, diverticular disease.
- Strength and coordination- neuro and musculoskeletal exam (i.e., sitting posture, use of upper extremities including range of motion, tremors, fine motor movements). Refer to Occupational and Physical Therapist for assessment, as appropriate.
- Psychological - affective disorders, especially depression.
- Pain - general and localized especially in jaw, mouth, throat, gastrointestinal.
- Endocrine - Fasting blood sugar, microalbuminuria and thyroid-stimulating hormone in weight loss, for undiagnosed/poorly controlled diabetes and thyroid disease.
- Medications - sedation, abnormal movements, dehydration. Pharmacologist to determine polypharmacy.

Intake (precise measurement needed as estimates can be inaccurate)

- Calorie count for 3 days (including one weekend day, if in community).
- Weighing of food (pre- and post-meals, if precise intake is required).
- Measurements of dehydration especially orthostatic hypotension (systolic blood pressure drops 20 mmHg two minutes after position change [e.g., sit to stand]).
- Biochemical - monitor laboratory diagnostics for abnormalities.
- Diet history - designed by registered dietitian and completed by nursing staff.

Cognition after Diagnosis Established through Neuropsychological Testing (use the 4 A's of Alzheimer's disease as they influence eating, plus anorexia)

- Aphasia: cannot verbally express preferences.
- Apraxia: cannot manipulate utensils and food prior to eating, cannot manipulate food within mouth/swallow.
- Agnosia: cannot recognize utensils, food.
- Amnesia: forgets having eaten, does not recognize need to eat.
- Anorexia: lack of desire to eat, possible physiological basis (i.e., failure to thrive).

Environment/Ambience

- Dining or patient room: personal trappings versus institutional; no treatments or other activities occurring during meals; no distractions.
- Tableware: use of standard dinnerware, e.g., china, glasses, cup and saucer, flatware, tablecloth, napkin versus disposable tableware and "bibs".
- Furniture: elders seated in armchair, table appropriate height versus eating in wheelchair or in bed.

- Noise level: environmental noise from music, care givers, television is minimal; personal conversation between patient and care giver is encouraged.
- Light: adequate and nonglare-producing versus dark, shadowy, or glaring.
- Odor: familiar smells of food prepared versus all food prepared away from elder or medicinal smells and waste.
- Adaptive equipment: available, appropriate, and clean; caregivers and/or elder is knowledgeable in use. Occupational therapist assists in evaluation.

#### Relationship with Caregiver

- Social atmosphere: meal sharing versus accomplishment of task.
- Position of caregiver relative to elder: eye contact, seating so faces are in same plane (en face).
- Pacing and choice: caregiver allows elder to choose food and determine tempo of meal; relies on elder's preference whenever known, voiced, or expressed through gestures and/or sounds.
- Cueing: caregiver cues elder whenever possible with words or gestures.
- Self-feeding: encouragement to self-feed with multiple methods versus assisted-feeding to minimize time.

#### Evaluation of Expected Outcomes

See the "Potential Benefits" field.

#### Follow-Up Parameters to Monitor Closely

- Providers' competency to monitor nutritional status, and eating and feeding behaviors.
- Documentation of nutritional status, eating and feeding behaviors.
- Documentation of care strategies and follow-up of alterations in nutritional status, and eating and feeding behaviors.

#### CLINICAL ALGORITHM(S)

None provided

### EVIDENCE SUPPORTING THE RECOMMENDATIONS

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

### BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### POTENTIAL BENEFITS

For Patient

- Diet assessment will be completed upon admission to unit or service and documented
- Weight and height will be measured initially and weight measured at least weekly
- Assessment of patient, context, and caregiver interaction will occur after meals in which less than 50% of food offered is consumed
- Diagnostic work-up, care, and treatment by interdisciplinary team will be performed, if deviations from expected nutritional norms exist
- Corrective and supportive strategies reflected in plan of care

#### For Health Care Provider

- System disruptions at mealtimes minimized
- Family and paraprofessional staff informed and educated to patient's special needs to promote safe and effective meals
- Maintenance of normal meals and adequate intake for the patient reflected in care plan
- Competence in diet assessment; knowledge of and sensitivity to cultural norms of mealtimes reflected in care plan
- Quality of life issues emphasized in maintaining social aspects of dining
- End-of-life decisions regarding nutrition respected

#### For Institution

- Documentation of nutritional status and eating and feeding behavior meets expected standard
- Alterations in nutritional status, eating and feeding behaviors assessed and addressed in a timely manner
- Referrals to interdisciplinary team (geriatrician, advanced practice nurse [nurse practitioner (NP)/certified nurse specialist (CNS)], dietitian, speech therapist, dentist, occupational therapist, social worker, pastoral counselor, ethicist) appropriate
- Nutritional, eating and/or feeding problems modified to respect individual wishes and cultural norms

#### POTENTIAL HARMS

Not stated

### QUALIFYING STATEMENTS

#### QUALIFYING STATEMENTS

Not stated

### IMPLEMENTATION OF THE GUIDELINE

#### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Getting Better  
Living with Illness

### IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

Amella EJ. Mealtime difficulties. In: Mezey M, Fulmer T, Abraham I, Zwicker DA, editor(s). Geriatric nursing protocols for best practice. 2nd ed. New York (NY): Springer Publishing Company, Inc.; 2003. p. 66-82. [28 references]

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2003

### GUIDELINE DEVELOPER(S)

The John A. Hartford Foundation Institute for Geriatric Nursing - Academic Institution

### GUIDELINE DEVELOPER COMMENT

The guidelines were developed by a group of nursing experts from across the country as part of the Nurses Improving Care for Health System Elders (NICHE) project, under sponsorship of The John A. Hartford Foundation Institute for Geriatric Nursing.

### SOURCE(S) OF FUNDING

Supported by a grant from the John A. Hartford Foundation.

### GUIDELINE COMMITTEE

Not stated

### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Primary Author: Elaine J. Amella, PhD, APRN, BC, GNP

#### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

#### GUIDELINE STATUS

This is the current release of the guideline.

#### GUIDELINE AVAILABILITY

Copies of the book Geriatric Nursing Protocols for Best Practice, 2nd edition:  
Available from Springer Publishing Company, 536 Broadway, New York, NY  
10012; Phone: (212) 431-4370; Fax: (212) 941-7842; Web:  
[www.springerpub.com](http://www.springerpub.com).

#### AVAILABILITY OF COMPANION DOCUMENTS

None available

#### PATIENT RESOURCES

None available

#### NGC STATUS

This summary was completed by ECRI on July 30, 2003. The information was  
verified by the guideline developer on August 25, 2003.

#### COPYRIGHT STATEMENT

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